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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,873	09/18/2006	Wataru Ikeda	P36315-02	3675
42212 7590 06/23/2011 PANASONIC PATENT CENTER 1130 CONNECTICUT AVENUE NW, SUITE 1100 WASHINGTON, DC 20036				
EXAMINER NGUYEN, HUY THANH				
ART UNIT		PAPER NUMBER		
2481				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/572,873

Applicant(s)

IKEDA ET AL.

Examiner

HUY T. NGUYEN

Art Unit

2481

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15, 16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-16 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/30/11.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 15 and 18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 15 is directed to nonfunctional descriptive data on a non-transitory computer readable medium. Since the data does not interact or impart to any hardware and software structural components to provide a certain function The data on a medium is not make themselves the statutory. The recited data and non-transitory medium can be a piece of paper on which the data are printed such as an image or drawings. The paper can be read by a computer such as a scanner or paper copier.

Claims 18 is directed a module to execute an application and the non functional data on a medium. Since there is no structural components to executed the application to read the data and access the data to perform certain function ,the application and nonfunctional data do not make themselves the statutory. The recited modules are not implied structural components and they can be a part of software. Further method claim 16 is not tied to a particular apparatus.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 16 and 18. are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 16 and 18 reciting an apparatus and method for playback a title .
However, there is not means for positive steps for controlling reading out and playing back the recorded title from a medium on each operation mode.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 15-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsumagari et al (US 2003/0161615 A1) in view of Kimura et al (6,5,094) "Digital Television Application Manager" (NPL Document, authors C. Peng and P. Vuorimaa), hereinafter referred to as Peng.

Regarding claims 15, 16 and 18, Tsumagari discloses an apparatus for a computer -readable recording medium storing thereon an index table and a plurality of operation mode objects (see [0058]: "...DVD video disc 1 ...DVD Video contents 10...with the same data structure as the convention DVD Video standard...Also, enhanced navigation (to be abbreviated as ENAV thereafter) contents 30, which allow diversified playback of video contents (or AV contents) 10..."; see [0062]: "The DVD Video are records management information called video manager VMG and one or more video contents (or AV contents) called video title sets VTS...VMG is management information...and contains control data VMGI...Each VTS contains control data VTSI of that VTS..."; see [0064] - [0065]: "ENAV contents...30 in Fig. 30 are prepared as a mechanism that allows the user to play back the contents (movie or music) of each VTS by a method different from VMG/VTSI prepared by the provider, and to play back while adding contents different from VMG/VTSI prepared by the provider...Logically, ENAV contents 30 can be classified into ENAV playback information, and the data body of ENAV contents. The data body of ENAV contents contains audio data, still image data, text data, moving image data, and the like. The ENAV playback information contains a markup language, script language or the like, which describes playback methods (display method, playback order,

playback switch sequence, selection of data to be played back and the like)..."); wherein the index table shows a plurality of titles in correspondence with the plurality of operation mode objects, at least one of the operation mode objects being a first operation mode object that is for use in a movie mode, and at least another one of the operation mode objects being a second operation mode object that is for use in a virtual machine (see [0064] - [0065] ENAV contents...30 in Fig. 30 are prepared as a mechanism that allows the user to play back the contents (movie or music) of each VTS by a method different from VMG/VTSI prepared by the provider, and to play back while adding contents different from VMG/VTSI prepared by the provider...Logically, ENAV contents 30 can be classified into ENAV playback information, and the data body of ENAV contents. The data body of ENAV contents contains audio data, still image data, text data, moving image data, and the like. The ENAV playback information contains a markup language, script language or the like, which describes playback methods (display method, playback order, playback switch sequence, selection of data to be played back and the like)..."; see [0066]: "For example, as language used as the playback control information, markup languages such as...Javascript, and the like, and so forth can be used in combination. The description contents of the ENAV playback information described in these languages are parsed by ENAV interpreter 330 in Fig. 1 to interpret parsed contents.");

the first operation mode object includes a navigation command that shows a control procedure (see [0063]: "A playback select menu or the like of each title (VTS#1 to

VTs#n) is given in advance by a provider...and playback control information (program chain information PGCI) in VTsI."),

the second operation mode object includes management information (see [0067]: "...the ENAV playback information can contain file information of the ENAV contents (information of a file to be referred to, and information of a file to be referred to instead if the file to be referred to is not present...)...synchronization information (information used to control to play back the DVD Video contents in connection or combination with that of the ENAV contents at a predetermined timing and duration information (information indicating the display time range or timing range of the ENAV contents)."; see also [0073]: "... (if an ENAV playback control method is read and stored in a memory in advance, a process of the ENAV contents data body can be started without any delay when the ENAV contents data body is read).").

Tsumagari fails to teach using a cache for storing file management information. Kimura teaches an apparatus using a cache for storing the file management information and readout the management information (column 17, lines 58-68). It would have been obvious to one of ordinary skill in the art to modify Tsumagari with Kimura by using a cache with the Tsumagari apparatus for storing the management information of files and reading out the information when needed as a second mode thereby enhancing the capabilities of the apparatus of Tsumagari for accessing and retrieving the information of the title.

Tsumagari as modified with Kimura fails to disclose the file to be read into the cache as shown by the cache management information is a Java archive file which

includes a class file with regard to an Xlet program. The examiner maintains it was well known to include the missing limitations, as taught by Peng.

In a similar field of endeavor, Peng discloses the file to be read into the cache as shown by the cache management information is a Java archive file which includes a class file with regard to an Xlet program (see page 104, Section 1 : "The DVD-MHP defines an application as a functional implementation of an interactive service... Each application has a lifecycle (i.e., the sequence of steps by which an application is initialized, undergoes various state changes, and is eventually destroyed) [4]. Such DVB-Java applications are called Xlet applications...The application manager defines an application lifecycle model and a communication protocol between Xlet and the application manager...A DVB-Java application (i.e. Xlet) is actually a set of Java classes that operate together and need to be signaled as a single instance to the application manager so that it can control its state changes...All the information of downloadable applications is stored in an AIT table, which is multiplexed and transmitted together with other elementary streams in MPEG-2 transport stream..."; see page 105, Section 3.1 and figure 2, particularly the Application Lifecycle Model showing the "load application" and "initialize" states of an Xlet; see also page 106, Section 4.2: "The application manager consists of some functions as well as the functions contained in the XletContext methods. One of these functions includes caching the applications information...When the application manager receives the viewer's request to start the application during watching the program, it creates the data in the above table (the first entry). This procedure includes decoding transport stream to get application information

(e.g., location of classes, etc.) from the AIT and save them in the system configuration file.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the medium of Tsumagari to include the teachings of Peng, for the purpose of efficiently utilizing the limited resources of set-top box (see Peng, page 104, "Abstract").

Response to Arguments

7. Applicant's arguments filed 13 May 2011 have been fully considered but they are not persuasive. Applicant argues that Tsumagari fails to teach cache management information for a second mode. However, it is noted that using a cache for storing files and in management information for managing the cache is well known in the art as taught by Kimura.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T. NGUYEN whose telephone number is (571)272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter-Anthony Pappas can be reached on (571) 272-7646. The fax phone number for the organization where this application or proceeding is assigned is 571- /HUY T NGUYEN/

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUY T NGUYEN/
Primary Examiner, Art Unit 2481